



# Guidance for opioid reduction in primary care

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## Background

Over the past 10-15 years it has become clear that opioids are not the safe and effective treatment for chronic non-cancer pain that was first thought.

The message in the 1990s, taken from experience in palliative care, was that any pain can be treated with opioids providing the dose was high enough and the presence of pain protected against the development of addiction. Opioid prescribing increased as a result and, indeed, is increasing still.

It is now clear that, although opioids provide effective analgesia for acute pain and in palliative care, there is little evidence of benefit for long-term opioids in patients with persistent non-cancer pain as regards pain, quality of life or functioning. Conversely there is now a better appreciation of the risks, including dependence and opioid-related mortality.

The British Pain Society recommends a maximum of 120mg morphine equivalent dose in 24 hours. If the patient still describes significant pain at this dose, it can be assumed that the pain is not opioid sensitive and the opioids should be reduced and stopped.

## Dose calculator: Calculation of Morphine Equivalent Daily Dose (MED)

### [Opioid calculator-Oxford PMC-v1.2.xlsx](#)

Opioids Aware (<https://www.fpm.ac.uk/faculty-of-pain-medicine/opioids-aware>) is a website resource for patients and healthcare professionals to support safe prescribing of opioid medicines for pain. It was developed in collaboration with Public Health England, the Faculty of Pain Medicine and the British Pain Society with representatives from the Royal College of General Practitioners, the Royal Pharmaceutical Society and the Faculty of Addictions, Royal College of Psychiatrists.

### Opioids Aware five headline points

1. Opioids are very good analgesics for acute pain and for pain at the end of life but there is little evidence that they are helpful for long term pain.
2. A small proportion of people may obtain good pain relief with opioids in the long term if the dose can be kept low and especially if their use is intermittent (however it is difficult to identify these people at the point of opioid initiation).
3. **The risk of harm increases substantially at doses above an oral morphine equivalent of 120mg/day, but there is no increased benefit.**
4. If a patient is using opioids but is still in pain, the opioids are not effective and should be discontinued, even if no other treatment is available.
5. Chronic pain is very complex and if patients have refractory and disabling symptoms, particularly if they are on high opioid doses, a very detailed assessment of the many emotional influences on their pain experience is essential.

The following information is produced by the Oxford Pain Management Centre as a guide to managing the patient on opioids: which factors would cause concern, how to perform an opioid trial and how to wean high dose opioids.

## The opioid trial

A small number of patients with chronic non-cancer pain derive some functional benefit from low dose opioids (less than 120mg morphine equivalent dose per day). An opioid trial can determine whether opioids may prove useful as part of a pain management strategy or not. It is important to remember that short term response to opioid therapy does not predict long term therapy which may be limited by adverse effects or declining efficacy.

A structured approach to how to perform an opioid trial can be found at

<https://www.rcoa.ac.uk/faculty-of-pain-medicine/opioids-aware/structured-approach-to-prescribing>

A successful short-term opioid trial does not predict long-term efficacy.

## Side effects of long-term opioids

- **Constipation**
- **Nausea**
- **Daytime somnolence**
- **Poor concentration and memory loss**
- **Increased risk of falls**
- **Opioid-induced ventilatory insufficiency**

The respiratory effects of opioids are more pronounced during sleep. Fatalities have been reported in patients with obstructive sleep apnoea who are prescribed opioids, and sleep apnoea may be a relative contraindication to opioid therapy. This is particularly important if patients are taking other central respiratory depressants such as benzodiazepines or gabapentinoids.

- **Effects on hormones**, particularly reduced testosterone levels (in men and women), leading to infertility, reduced libido, amenorrhoea, sexual dysfunction, fatigue, hot flushes, depression and osteoporosis.
- **Effects on the immune system.** Both animal and human studies have demonstrated that opioids have an immunomodulating effect.
- **Opioid-induced hyperalgesia (OIH)**

OIH may be diagnosed if the patient on long-term opioid therapy presents with increased pain. This might be qualitatively and anatomically distinct from pain related to disease progression or to breakthrough pain resulting from development of opioid tolerance. Pain associated with hyperalgesia tends to be more diffuse than the pre-existing pain and less defined in quality. Stopping opioids completely will reverse OIH, although it can take months after cessation for the pain sensitivity to recover.

- **Problem opioid use, or opioid analgesic dependence**
- **Increased mortality**

Prescription of long-acting opioids for chronic non-cancer pain, compared with anticonvulsants or tricyclic antidepressants, is associated with a significantly increased risk of all-cause mortality. Research from the USA shows that patients who take more than 100mg of morphine equivalent per day have a 7 times increased risk of death compared to patients who take 20mg per day or less, such as codeine 30mg four times a day.

## Opioid analgesic dependence

Risk factors (these may not necessarily preclude the use of opioids for pain, but ongoing use will need very careful supervision):

- Previous history of addiction
- Family history of addiction
- Reluctance to acknowledge psychological contributors to pain
- Significant psychiatric comorbidity

## Alarm bells during opioid treatment

- Descriptions of increasing pain with requests for increased opioid dose
- Psychological deterioration
- Reliance on pharmacological treatment only, with no engagement with self-management of exercise, physio, psychological support etc.
- Lost prescriptions / dropped bottles / extra needed for trips away etc.
- Continued use despite side effects (constipation, sedation)

## Reducing opioids

Over the last two decades, patients with chronic non-cancer pain have been prescribed opioids in good faith based on evidence that we now know to be misleading. We now have a population of patients who are taking long term high dose opioids and exposed to the associated substantial risks. The majority will still have continuing pain and a poor quality of life reflecting the little benefit provided by opioids. These patients should be supported in reducing their opioids to a safer level (such as 120mg MED) or, preferably, stopping them completely.

Equally if a patient's behaviour towards opioids causes concern, they too should be supported in ceasing their use.

The following is a guide, with more advice available via the Oxford PMC email advice line:  
[oxonpainadvice@nhs.net](mailto:oxonpainadvice@nhs.net)

## Five practical steps to reduce high dose opioids

1. **Education:** explain the importance of reducing opioids to the patient
2. **Engagement:** give the patient as much choice as possible around how to reduce their opioids.
3. **Effecting the weaning plan**
4. **Emotional impact:** manage anxiety and depression
5. **Expectations:** ensure the patient understands that this can be difficult, and that they need support

## 1. Education: explain the importance of reducing opioids to the patient

The “[Patient information for opioid reduction](#)” sheet provides the background for the need for opioid reduction. Patients engage best with the process if they recognise opioid side effects that are personally relevant to them.

### [Patient information for opioid reduction-Dec 2017-v1.3.docx](#)

This may be constipation, day-time somnolence or poor night-time sleep, or it may be the drug driving law, introduced in March 2015 <https://www.gov.uk/government/collections/drug-driving>. Patients with a blood level of 80mcg/l of morphine, corresponding to a steady dose of around 209mg morphine equivalent per day, should not drive: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/167971/drug-driving-expert-panel-report.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/167971/drug-driving-expert-panel-report.pdf).

## 2. Engagement: give the patient as much choice as possible around how to reduce their opioids

It doesn't matter how the opioids are reduced as long as the overall daily dose continues to decrease, and that there is an understanding that the opioid doses will **not** increase once reduced. Giving the patient choice over how this is achieved gives them more control and ownership of the process, improves their engagement and is more likely to succeed.

**Option 1.** Keep the modified-release (MR) dose stable first and wean down the immediate release prn doses. The patient can be given the choice of:

- a) keep the same frequency of IR doses (e.g. 4 times per day) and decrease the dose each week (e.g. 15mg to 10mg to 5mg), or
- b) maintain the same dose but reduce the frequency each week (e.g. from 4 times a day, to 3 times to twice).

Most patients find the former option easier initially as the frequency of taking opioid is as much habit as anything else.

This means that when the subsequent MR wean happens there will be no chance of compensatory increase in the prn dose. If necessary, the patient could replace their prn dose with paracetamol or ibuprofen to maintain the mechanical habit of taking a tablet, although they should concentrate on using non-pharmacological means of managing their pain during exacerbations. The pain tool kit provides useful strategies: <http://www.paintoolkit.org/>

**Option 2.** Reduce the modified release (MR) dose first by around **10% per dose per week**, and keep the prn immediate release dose steady, but caution the patient against increasing the prn doses which would negate the effect of the MR wean.

It is often useful to let the patient decide whether to reduce the morning or evening MR dose first to allow them more control. For example, a patient who feels that their pain is worse at night may choose to reduce the morning dose first:

	<b>MST am (mg)</b>	<b>MST pm (mg)</b>
<b>Week 1</b>	80	80
<b>Week 2</b>	70	80
<b>Week 3</b>	70	70
<b>Week 4</b>	60	70
<b>Week 5</b>	60	60

### 3. Effecting the weaning plan

#### a) Change liquid formulations to tablets

Change oramorph to sevredol tablets: both are immediate release morphine, with the same absorption time, same duration of action, same dose, but dispensing a fixed number of tablets allows the GP more control over the patient's use and subsequent reduction. We find that many of our patients find it almost impossible to reduce the amount of oramorph they take when there is a whole bottle available. This is particularly important when the patient describes unsafe behaviour such as "swigging" from the bottle rather than measuring doses. The same applies to OxyNorm liquid.

Also oramorph contains 10% alcohol (oxycodone liquid does not), so any patient who reports that oramorph is much better than sevredol could possibly be flagging an alcohol dependence (even if not conscious by the patient).

#### b) Plan the reduction

The attached templates can be used to plan the initial reduction, and are based on reducing the modified release opioid. Enter the date of the first reduction and the date column will self-populate as weekly or fortnightly (depending on template chosen). Enter the current doses of opioid and the rest of the table will self-populate based on a decrease of approximately 10% per dose. The plan can then be adjusted during the course of the wean if necessary to increase the time between reductions or reduce the dose decreases if the patient is struggling.

### Opioid reduction templates

#### [Opioid reduction templates](#)

Fentanyl patch template – fortnightly reductions are recommended as the dose decreases of 12.5mcg/h, as dictated by patch sizes, are thus greater than the other opioid reductions.

### 4. Emotional impact: manage anxiety and depression

Anxiety is to be expected during opioid reduction. If a patient has taken opioids for many years they may have a sense that they won't be able to cope without them.

Evidence suggests that withdrawal symptoms are to be expected at significant reductions, but if the reduction is less than 50-75% of the previous day's dose then the patient shouldn't experience withdrawal. Theoretically, therefore, a patient would need to go from 80mg oxycodone one day to 20-40mg the next before getting true withdrawal.

In practice we find that many patients experience what they feel to be withdrawal symptoms with even small dose reductions, although this is often related to anxiety rather than opioid withdrawal (anxiety exacerbates withdrawal symptoms). Plenty of reassurance is needed that this is not dangerous, and is a safe reduction. If necessary it is wise to work with the patient to reduce the size of the dose reductions (e.g. to 5mg rather than 10mg) or increase the duration between step decreases (e.g. every fortnight rather than every week) to maintain their engagement in a continued wean. Do not be tempted to treat withdrawal symptoms with more opioids or benzodiazepines. The clinical opiate withdrawal scale (COWS) can be used to quantify the severity of opioid withdrawal and help distinguish between objective and subjective symptoms that can be reassuring to both the patient and clinician.

<https://www.drugabuse.gov/sites/default/files/files/ClinicalOpiateWithdrawalScale>

Anxiety and depression often worsen during an opioid reduction, either because the long term opioids have suppressed noradrenaline and dulled usual emotions (in which case the increased anxiety then settles back down again), or because the reduction unmasks pre-existing psychopathology. If not managed well, this can derail the opioid reduction. Psychological support with psychologists, counsellors or IAPT (improving access to psychological therapies) services such as Talking Spaces (<http://www.talkingspaceplus.org.uk/>) will be helpful.

## 5. Expectations: ensure the patient understands this can be difficult, and that they need support

We make it clear to patients that the pain is likely to worsen in the short term during opioid weaning. Despite slow reductions they may also experience withdrawal symptoms, together with increased anxiety and depression. For this reason it is important that they have engagement, understanding and support from friends and family during the process. They should also develop non-drug techniques (relaxation, distraction, music, DVDs, walks etc.) to manage their pain and reduce the reliance on pharmacological treatment. The pain tool kit provides useful strategies: <http://www.paintoolkit.org/>. It can take 4-6 months after the cessation of opioids before they feel back to normal, i.e. for the pain, anxiety and depression to reduce.

In the longer term, the pain will reduce to a degree due to the reversal of opioid induced hyperalgesia (where long-term opioids increase, rather than decrease, pain sensitivity). For patients with abdominal pain, this pain will also improve as the opioids will have been contributing to gut dysmotility.

## Useful resources for patients

- <http://www.ouh.nhs.uk/services/departments/pain-management/default.aspx>
- The **Pain Toolkit** app gives practical advice and techniques to manage pain.
  - [www.paintoolkit.org](http://www.paintoolkit.org)
- This is an excellent five minute overview of chronic pain by the Hunter Integrated Pain Service in Australia: [www.youtube.com/watch?v=5KrUL8tOaQs](http://www.youtube.com/watch?v=5KrUL8tOaQs)

- There is a follow up video called “Brainman stops his opioids”:  
<https://www.youtube.com/watch?v=Ml1myFQPdCE>
- And another good explanation of how your mood can affect pain:  
<https://www.tamethebeast.org/#home>
- **Managing chronic pain - NHS website**
  - Sheffield Persistent Pain -  
<https://www.sheffieldachesandpains.com/persistent/persistent-pain/>
- **Support for patients with pain**
  - British Pain Society - [www.britishpainsociety.org](http://www.britishpainsociety.org)
  - Pain Concern - <http://painconcern.org.uk>
- **NHS websites**
  - [www.nhsinform.co.uk/msk](http://www.nhsinform.co.uk/msk)
  - [www.nhs.uk](http://www.nhs.uk)
- **Videos about chronic pain and how to manage it**
  - Chronic pain - [www.healthtalk.org](http://www.healthtalk.org)
  - Chartered society of physiotherapy - <http://www.csp.org.uk/publications/10-things-you-need-know-about-your-back>  
with a very good video about back pain: <https://youtu.be/24P7cTQjsVM>
- **World Health Organisation (WHO) animated videos**
  - Depression - [www.youtube.com/watch?v=XiCrniLQGYc](https://www.youtube.com/watch?v=XiCrniLQGYc)
  - Stress - [www.youtube.com/watch?v=I6402QJp52M](https://www.youtube.com/watch?v=I6402QJp52M)
- **Apps:**
  - Mindfulness: <https://www.headspace.com/headspace-meditation-app>
  - Active walking:  
<https://www.nhs.uk/oneyou/active10/home#xfEeV0FM3W4Xo5gM.97>

## Selected references

- <https://www.fpm.ac.uk/faculty-of-pain-medicine/opioids-aware>
- Wesson DR; Ling W. The Clinical Opiate Withdrawal Scale (COWS). J Psychoactive Drugs 2003; 35(2): 253-259.
- Ray WA, Chung CP, Murray KT, Hall K, Stein CM. Prescription of Long-Acting Opioids and Mortality in Patients With Chronic Noncancer Pain. JAMA. 2016 Jun 14;315(22):2415-23.
- Bohnert AS, Valenstein M, Bair MJ, Ganoczy D, McCarthy JF, Ilgen MA, Blow FC. Association between opioid prescribing patterns and opioid overdose-related deaths. JAMA. 2011 Apr 6;305(13):1315-21.